



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/598,984	06/21/2000	Besma Kraiem	282474US8X	6533
22850	7590	03/18/2009	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			LY, NGHI H	
			ART UNIT	PAPER NUMBER
			2617	
			NOTIFICATION DATE	DELIVERY MODE
			03/18/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 09/598,984	<b>Applicant(s)</b> KRAIEM ET AL.	
	<b>Examiner</b> NGHI H. LY	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18,20-31 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17,20-31 and 36 is/are allowed.
- 6) ☒ Claim(s) 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chuprun et al (US 6,115,580) in view of Sumic (US 5,568,399).

Claim 18, Chuprun teaches a network device for wireless communication in a wireless network including a plurality of network devices (see wireless network of fig.1), wherein a topology map indicating the quality of connectivity of each network device of the wireless network with all other network devices in said wireless network is created (see mobile network devices of fig.1, see wireless connection in-between each mobile network device, and column 4, lines 32-35, see "*each node is transmitted to all of the*

Art Unit: 2617

*other nodes*”), comprising: means for generating and directly wirelessly communicating respective control signals for initiating a measurement phase and initiating a reporting phase (see Abstract, column 2, lines 1-14 and column 3, lines 45-50, see “quality”, see column 3, lines 45-50 and column 6, lines 22-32, see “quality”, “path selection” and see column 6, lines 22-26, where Chuprun teaches “*For example, link quality determination can be performed in a single node (or some number less than all) in the network 10 and then distributed to the other nodes*”. In this case, Chuprun’s “distributed” reads on applicant’s “a reporting phase”), and means for performing a creation of a topology map indicative of the quality of wireless connectivity of each network device of said wireless network with all other network devices in said wireless network solely on the basis of measurement results directly received during the reporting phase (see fig.1, Abstract, column 2, lines 1-14, column 3, lines 45-50 and column 6, lines 22-32, see “quality”, “path selection”).

Chuprun does not specifically disclose transmitting at least part of said topology map to the other network devices.

Sumic teaches transmitting at least part of said topology map to the other network devices (see column 1, lines 39-55).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to provide the above teaching of Sumic to the system of Chuprun in order to provide a decision support environment that can be used to address complex problems faced by distribution dispatchers and system operators in an emergency situation (see Sumic, column 1, lines 39-41).

***Allowable Subject Matter***

4. Claims 1-17, 20-31 and 36 allowed.

Regarding claims 1, 13, 20 and 31, Chuprun teaches a method to create a topology map of a **wireless network** (see wireless network of fig.1), wherein said wireless network includes a plurality of **network devices** (see network devices of fig.1), wherein said network devices include **mobile network devices** provided for direct wireless communication in-between each **mobile network device** (see mobile network devices of fig.1, see wireless connection in-between each mobile network device, and column 4, lines 32-35, see “*each node is transmitted to all of the other nodes*”), and wherein said topology map indicating the quality of connectivity of each of said plurality of network devices with all other network devices of said plurality of network devices (Abstract, column 2, lines 1-14 and column 3, lines 45-50, see “quality”), comprising: performing a measurement phase in which a calibration signal is successively broadcasted by each network device and in which all respective other network devices receiving said calibration signal directly from a broadcasting network device measure the received signal quality (Abstract, column 2, lines 1-14, column 3, lines 45-50 and column 6, lines 22-32, see “quality”, “path selection”), performing a reporting phase in which the measurement results are directly wirelessly transmitted from each network device to the network device creating said topology map (see Chuprun, column 6, lines 22-26, where Chuprun teaches “*For example, link quality determination can be performed in a single node (or some number less than all) in the network 10 and then*

**distributed** to the other nodes". In this case, Chuprun's "distributed" reads on applicant's "transmitted"), and performing a creating phase in which said topology map of the network is created within the network device creating said topology map solely on a basis of all received measurement results (see fig.1, Abstract, column 2, lines 1-14, column 3, lines 45-50 and column 6, lines 22-32, see "quality", "path selection").

Sumic teaches performing a transmission phase in which said network device creating said topology map transmits at least part of said topology map to the other network devices (see column 1, lines 39-55).

Chuprun and Sumic, alone or in combination, fails to teach performing a reporting phase in which a reporting control signal is broadcasted by a network device creating said topology map to each other network device and in which the measurement results are directly wirelessly transmitted from each other network device receiving said reporting control signal to the network device creating said topology map.

### ***Response to Arguments***

5. Applicant's arguments with respect to claim 18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2617

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571)272-7911. The examiner can normally be reached on 9:30am-8:00pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Art Unit: 2617

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghi H. Ly

/Nghi H. Ly/

Primary Examiner, Art Unit 2617